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Youth biologist Casey Salestrom is now enrolled in the Wildlife Ecology Program at Colorado State University and plans to pursue a master's degree in marine science and ecology.

Youth biologists busy at Grand Canyon

by Elaine F. Leslie

Summer 2002 marked the sixth year that NPS biologists at Grand Canyon National Park, Arizona, have demonstrated the concept that parks are powerful environments for learning. The park and Grand Canyon National Park Foundation sponsor volunteers with a keen interest in biology and the work of the National Park Service. For two to four weeks, park staff supervise the volunteers, who range in age from 10 to 17. The program has attracted young people from coast to coast.

These youths participate in ongoing wildlife inventory and monitoring projects on the North and South Rims and along the Colorado River corridor. After training, they resolve human-wildlife conflicts, present interpretive programs, collect data from DNA sampling transects as part of noninvasive carnivore studies (see page 23), and live-trap small mammals for a vertebrate inventory. In 2002 they documented a species of kangaroo rat that was not known to inhabit the south side of the Colorado River (the river was thought to have been a barrier to the species).

Park staff fully understand the importance of involving young people in science as soon as they express an interest. The young volunteers acquire useful skills in wildlife management and have an opportunity to understand the role and function of a park biologist. These youths have gone on to graduate from college and have entered into advanced studies in wildlife ecology. Although this program requires patience, the investment pays off and has proved to be an enriching experience for volunteers and park staff alike. ■

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Great Smokies species numbers continue to climb

by Becky Nichols

The All Taxa Biodiversity Inventory (ATBI), a long-term effort to document all life-forms in Great Smoky Mountains National Park, completed its fifth year in 2002 and continued to build momentum. The park has hosted several "bioquests," events designed to identify a large number of specimens over a short period of time. Many scientists are on-site during these events, in addition to volunteers and students who assist and learn from the scientists. The largest bioquest to date brought together 30 lepidopterists (moth and butterfly specialists) in the park from June 9 to 11, 2002.

During this event, special emphasis was placed on high-elevation habitats—areas that may be at great risk from air pollution and global warming. Teams of volunteers, with llamas to carry the heavy traps and batteries, visited four remote balds. At lower elevations, schoolchildren beat the bushes for caterpillars and leaf miners. Overall, collecting was heaviest the first day, with the second day devoted to producing vouchers—specimens that scientifically document species presence—and species lists.

As of December 2002, the total number of identifications for the two-day quest stood at 860 species, but more are being identified in the researchers' labs. Of this total, an estimated 51 were undescribed species and 133 other species were new records for the park. For the ATBI as a whole, by year's end 334 undescribed species had been reported and an additional 2,121 new park records had been documented. These numbers change rapidly as the project moves forward. ■

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Butterfly and moth experts sort and identify specimens caught during the 2002 lepidoptera quest.

Volunteers vital in completing National Capital Region bird inventories

by John Sinclair

In the early stages of the National Capital Region's Inventory and Monitoring Program, a data review determined that additional baseline information on bird species within six National Capital Region parks was needed. A large number of avid bird-watchers and clubs within the region provided a cost-effective means to complete the inventory. More than 30 volunteers have joined efforts with the National Park Service at Antietam National Battlefield, Catoctin Mountain Park, Harpers Ferry National Historical Park, Manassas National Battlefield Park, Prince William Forest Park, and Wolf Trap Farm Park. These skilled birders began visiting the parks in January 2001 and have collectively spent more than 2,300 hours in the field, 925 hours in 2002, and have identified 175 species, with more than 140 species identified in 2002. Many of these species have never been recorded in the parks. Furthermore, the volunteers have made special efforts to confirm nesting species, particularly those identified as species of concern by Partners in Flight, a cooperative effort among multiple agencies, nongovernmental organizations, and industry to conserve birds. The data collected will provide park managers with seasonal and breeding distributions, which can be used to identify and protect critical habitats.

Thanks to the efforts of the volunteers, the initial program goal of documenting 90% of the expected resident bird species has been reached at four of six parks. However, because the program is volunteer-based, it will continue at all parks only so long as participants are interested. ■

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Volunteers survey bird species at Manassas National Battlefield Park, Virginia.